

## ABSTRACT OF THE DISCLOSURE

A tributary time-space switch and a method of switching are provided having low memory requirements. The switch includes a number of inputs and outputs. Each of the inputs receives an input data stream carrying tributary payloads from an external  
5 input link that are capable of being individually switched in space and time. A write controller causes input columns of the input data stream to be written to a common buffer according to a write pointer. In parallel, a read controller causes the input columns to be read from the common buffer to output columns of an output data stream according to a read pointer. For each of the output columns, the read pointer selects an  
10 input column from a limited portion of the buffer that contains a set of the input columns that are capable of being switched in time to the corresponding output column according to a communication protocol.